

## REMARKS/ARGUMENTS

Enclosed is a Declaration under 37 C.F.R. §1.132 that is submitted in response to the supplemental examiner's answer in the Communication after Remand to the Examiner, addressing issues relating to entry of Dekazos et al. Journal of Food Science vol. 35: pp.237-241 (1970) into the record.

In the supplemental examiner's answer, the Examiner states that because there is no clear indication found in the Specification that the extraction protocols used in Examples 1 and 2 actually yielded cyanidin aglycone, and no clear indication in the prior art that cyanidin aglycone occurs naturally, it remains the opinion of the Examiner that Appellants were not in possession of a composition comprising anthocyanin and cyanidin. However, it apparent from Dekazos et al. that cyanidin is present naturally in the plant tissues, or alternatively, that cyanidin hydrolysis occurs even during purification procedures designed to minimize hydrolysis. According to Dekazos et al.:

"The first 2 pigments of this study were found to be

cyanidin and peonidin. The existence of the anthocyanidin in fresh unpurified pigment extract has been confirmed in other studies. Since it has been said that anthocyanidins are unlikely to occur naturally in plant tissues in the free state, chromatograms of extracts were run within minutes of extracting tissue (skin of overripe, fresh red tart cherries) with ice-cold methanol containing 0.1% conc HCl at 32°F to minimize hydrolysis. Paper chromatography, using HOAc-HCl as solvent showed that the 2 anthocyanidins were noticeable. Special effort was expended to minimize hydrolysis; however, it might possibly still occur."

(Dekazos et al.: page 240, last paragraph of middle column, citation omitted). It is clear that Dekazos et al. were using their *best efforts to minimize hydrolysis during the extraction procedure*, however as seen in Figure 1 and Table 2 on page 238, cyanidin (whether naturally occurring in the plant tissues or due to undesired hydrolysis) was identified in the paper chromatograms.

As stated in the attached Declaration under 37 C.F.R. §1.132, it is possible that glucosidase enzyme from the cherry tissue is active under natural conditions and hence leads to the formation of cyanidin aglycone.

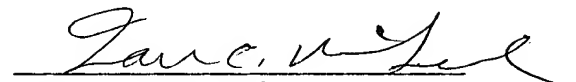
Attorney Docket No. MSU 4.1-541  
Appl. No. 09/761,143  
July 28, 2006

Fruit injury causes the release of glycosidase enzyme and production of cyanidin aglycone *in situ*. During the processing of cherries, anthocyanins readily hydrolyze to yield the aglycones. Dekazos et al. observed cyanidin in extracts despite their best attempts to avoid hydrolysis during purification. Therefore, cyanidin would be expected to be present in the mixture extracted by protocols used in Examples 1 and 2 of the Specification. Thus, the written description requirement of 37 CFR §112 has been met. Reconsideration of the rejection is requested.

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In light of the above, it is now believed that the Claims are each patentable and in condition suitable for allowance. Applicants respectfully request that a timely Notice of Allowance be issued in this case.

Respectfully,

  
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Enclosure: Declaration under 37 C.F.R. §1.132.